

ABSTRACT

A conservation tillage implement having three or more rows of individual coulter wheel assemblies laterally spaced apart and removably mounted on a cultivator frame, a coulter wheel assembly in a given row being staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row. The coulter wheel assemblies may be laterally adjustable and may be mounted to the cultivator frame using a mounting means that permits rotation about a vertical axis. The coulter wheel assemblies may comprise a coil spring having a horizontal spring axis to permit upward deflection in response to impact with an obstacle. Leveling attachments may optionally be mounted to the cultivator frame, along with additional field working tools. The implement is used in the management of crop residue as part of a minimum tillage strategy. The implement is particularly resistant to plugging and can be operated at high speeds without undue damage upon impact with obstacles. Advantageously, the implement can be operated in standing water, as found in the growing of rice.